

Rooks County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/28/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 14 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Rooks County economy.¹

These 14 sectors have a total direct output of approximately **\$112.8 million** and support **643 jobs** in Rooks County. Running the model for all 14 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Rooks County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	642.5	17.40%	\$30,276,277	16.54%	\$112,785,380
Indirect Effect	120.1	3.25%	\$8,426,274	4.60%	\$18,139,480
Induced Effect	37.9	1.03%	\$2,179,750	1.19%	\$4,349,115
Total Effect	800.5	21.68%	\$40,882,302	22.33%	\$135,273,975

As shown in the above table, agriculture, food, and food processing sectors support **801 jobs**, or **21.68%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 14 agriculture, food, and food processing sectors is approximately **\$40.9 million**, or **22.33% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **389 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Rooks County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	388.6	\$56,069,822
Grain farming	89.7	\$37,993,915
Support activities for agriculture and forestry	78.6	\$4,741,309
Wholesale trade	42.6	\$8,138,503
All other crop farming	32.2	\$2,847,187
Veterinary services	21.9	\$2,003,493
Truck transportation	17.1	\$2,932,442
Extraction of natural gas and crude petroleum	16.6	\$2,340,741
Landscape and horticultural services	13.0	\$489,206
Real estate	10.5	\$657,070

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$56.1 million** to the Rooks County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	388.6	\$56,069,822
Grain farming	89.7	\$37,993,915
Wholesale trade	42.6	\$8,138,503
Oilseed farming	6.3	\$7,388,553
Support activities for agriculture and forestry	78.6	\$4,741,309
Truck transportation	17.1	\$2,932,442
All other crop farming	32.2	\$2,847,187
Extraction of natural gas and crude petroleum	16.6	\$2,340,741
Veterinary services	21.9	\$2,003,493
Owner-occupied dwellings	0.0	\$1,114,259

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Rooks County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	6.3	\$7,388,553.14
Grain farming	89.7	\$37,993,915.56
Fruit farming	0.0	\$6.13
Tree nut farming	0.0	\$1,990.12
All other crop farming	32.2	\$2,847,187.28
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	388.6	\$56,069,820.40
Poultry and egg production	0.0	\$19,520.93
Animal production, except cattle and poultry and eggs	3.5	\$434,645.44
Commercial hunting and trapping	0.8	\$15,450.30
Support activities for agriculture and forestry	78.6	\$4,741,308.69
Bread and bakery product, except frozen, manufacturing	7.6	\$752,164.72
Frozen cakes and other pastries manufacturing	0.2	\$28,117.45
Veterinary services	21.9	\$2,003,492.83
Landscape and horticultural services	13.0	\$489,205.57

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Rooks County, the retail sector was omitted.